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**To study the antidepressant and anxiolytic effect of cod liver oil
on distinct brain tissues in wistar rat model of comorbid
depression**

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To study the antidepressant and anxiolytic effect of cod liver oil on distinct brain tissues in wistar rat model of comorbid depression

Abstract thesis

Neuropsychiatric disease has been considered as the most burdensome disease of society. In the recent era, the incidence of stress related neuropsychiatric disorders is increasing worldwide. High degree of comorbidity of depression and anxiety has been frequently associated with stressful life events. Previous research work shows that chronic unpredictable stress model can be a useful model of depression-comorbid anxiety. The relationship between diet and health has been recognized throughout recorded history. Recent trends in controlling and treating diseases tend to favour of natural compounds. Disease prevention through healthy preparation of foods and eating habits has been discussed in religious and civil writings for thousands of years as the human diet is essential in protecting the body against the development of diseases. One important natural product is cod liver oil. Beneficial role of cod liver supplement in various diseased conditions stimulated us to obtain the insight into the antidepressant activity in this chronic unpredictable stress model. The present study is first of its kind, which was conducted to investigate individual role of cod liver oil as an antidepressant agent in wistar rat model of comorbid depression by focusing cerebral cortex and hippocampus by analyzing the physiological, biochemical neurological and genetic parameters.

Keywords: Chronic unpredictable stress, depression, brain , Cod liver oil